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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,544	03/09/2004	Xianhai Chen	07783.0011.CNUS03	4402
27194	7590	07/27/2004	EXAMINER	
HOWREY SIMON ARNOLD & WHITE, LLP C/O M.P. DROSOS, DIRECTOR OF IP ADMINISTRATION 2941 FAIRVIEW PK BOX 7 FALLS CHURCH, VA 22042			TRA, TUYEN Q	
		ART UNIT		PAPER NUMBER
				2873

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/797,544	CHEN ET AL. <i>KD</i>	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tuyen Q Tra	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 14 July 2004.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-34 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,4-12 and 14-34 is/are rejected.  
 7) Claim(s) 2,3 and 13 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 09 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>0304 0704</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION****Drawings**

1. The Drawings filed on 03/09/2004 have been declared formal by the examiner.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 31 recites the limitation "said hardening of said thermoplastic or themoprecursor" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

**Claim Objections**

4. Claim 1 and 5 are objected to because of the following problem:

Claim 5 recites "capable of". Suggest a change to --operable for—since it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Claim 1 recites "repeating the about a) though d)" which draws examiner attention whether there is any empty display cell after step d). In order to perform step a), there must be at least one empty display cell, but it shows that after step d), all the empty display cells have been filled; therefore, repeating step a) would be unnecessary. Appropriate correction is needed.

**Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims (1+4), 5-7, (8+33), 9-12 and 14-30, 31, 32 and 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable, respectively, over claim 1, 2-4, 5, 6-9, 10-25, 27, 31 and 32 of previous U.S. Patent No. 6,545,797. Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose the process comprising of steps for a) filling said microcups with a filler material; b) removing the filler during or after the developing step; c) filling said developed microcups with a first color display fluid; d) sealing said display fluid-filled microcups; and e) repeating the above a) through d) processing steps sequentially with one or more different color display fluids until the multicolor display is formed. However, claim 1 of patent 6,545,797 further discloses steps for coating said filled microcups with a layer of photoresist; imagewise exposing and developing the exposed resist which reads on limitation of claim 4 of the current application. Therefore, it is obvious to one skill in the art at time invention was made that the limitation of claim 1 of patent number 6,545,797 is also limitation of claims 1 and 4 of the pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims (1+4+30), 5-7, (8+33), 9-12 and 14-29, 31, 32 and 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable, respectively, over claim (1+25+26), 2-4, 5, 6-9, 10-24, 27, 31 and 32 of pending application serial number 10/284,586. Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose the process comprising of steps for a) filling said microcups with a filler material; b) removing the filler during or after the developing step; c) filling said developed microcups with a first color display fluid; d) sealing said display fluid-filled microcups; and e) repeating the above a) through d) processing steps sequentially with one or more different color display fluids until the multicolor display is formed. However, claim 1 of pending application serial number 10/284,586 further discloses steps for coating said filled microcups with a layer of photoresist; imagewise exposing and developing the exposed resist which reads on limitation of claim 4 of the current application. Therefore, it is obvious to one skill in the art at time invention was made that the limitation of claim 1 of pending application serial number 10/284,586 is also limitation of claims 1 and 4 of the pending application.

8. Claims (1+ 4), 5, 6, 7, 9, 10, 11, 16, 17, 18, 23, 24, 27and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable, respectively, over claim (1+33), 26, 27, 28, 30, 31, 32, 36, 37, 38, 42, 43, 20 and 21 of pending application serial number 10/310,641. Although the conflicting claims are not identical, they are not patentably distinct from each other because both

disclose the process comprising of steps for a) filling said microcups with a filler material; b) removing the filler during or after the developing step; c) filling said developed microcups with a first color display fluid; d) sealing said display fluid-filled microcups; and e) repeating the above a) through d) processing steps sequentially with one or more different color display fluids until the multicolor display is formed. However, claim 1 of pending application number 10/310,641 does not disclose a sealing material which have a specific gravity lower than that of the display fluid. It has been held that to be entitled to weigh in method claims, the recited material limitation therein must be affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular material. Therefore, it is obvious to one skill in the art at time invention was made to use different kind of sealing material in step for sealing display device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### **Allowable Subject Matter**

9. Claims are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The reason for the indication of allowable subject matter is that (claim 2) the filling is carried out by screen printing, gravure printing or inkjet printing; (claim 13) wherein the photoresist comprises a layer with a thickness in the range of about 1 to 3 microns disclosed in the claims is not found in the prior art.

**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Tra whose telephone number is (571) 272-2343.

The examiner can normally be reached on Monday to Thursday from 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps, can be reached on (571) 272 - 2328. The fax number for this Group is (703) 872-9306.

tt

July 21, 2004



Hung Xuan Dang  
Primary Examiner